

DRAFT CONVERSION TECHNOLOGY REGULATIONS (May 6, 2003)

Article 6.7 Conversion Technology Regulatory Requirements

17XX1 General

- (a) This Article is adopted pursuant to and for the purpose of implementing the California Integrated Waste Management Act of 1989 (Act) commencing with Section 40000 of the [Public Resources Code](#), as amended. These regulations should be read together with the Act.
- (b) This Article sets forth the applicable requirements for a number of types of waste processing, commonly referred to collectively as “conversion technologies.” The regulatory tier requirements and state minimum standards of this Article are not applicable to an activity that meets the definition of recycling center in section 17402.5(d), or operations and facilities that are expressly addressed in regulations elsewhere in this Division, including but not limited to, Chapter 3.1 (compostable materials handling operations and facilities regulatory requirements, commencing with section 17850).
- (c) Nothing in this Article is intended to limit the power of any federal, state, or local agency to enforce any provision of law that it is authorized or required to enforce or administer.
- (d) Nothing in these standards shall be construed as relieving any owner, operator, or designee from the obligation of obtaining all required permits, licenses, or other clearances and complying with all orders, laws, regulations, or reports, or other requirements of other regulatory or enforcement agencies, including but not limited to, local health entities, regional water quality control boards, air quality management districts or air pollution control districts, local land use authorities, and fire authorities.

17XX2 Definitions

In addition to the definitions in section 17402, the following definitions apply to this Article:

- (a) “Anaerobic Digestion” means biological decomposition of organic materials in the absence of oxygen. This process may yield a number of products such as methane, electricity, and alternative daily cover.
- (b) “Catalytic Cracking” means a chemical process used by a conversion technology operation or facility in which plastic is depolymerized through the use of catalysts to produce components of diesel fuel, fuel oils, and gasoline.
- (c) “Conversion Technology” means the processing, through noncombustion thermal, chemical, or biological processes, other than composting, of solid waste to produce products, including, but not limited to, electricity, fuels, chemicals, or other products that meet quality standards for use in the marketplace. “Conversion Technology” includes, but is not limited to, , catalytic cracking, distillation, gasification, hydrolysis, and pyrolysis. “Conversion Technology”

does not include anaerobic digestion, biodiesel production, biomass conversion, composting (aerobic or anaerobic) or incineration.

- (d) “Conversion Technology Operation” or “Facility” means an operation or facility that uses a conversion technology to process solid waste. An operation or facility that uses a conversion technology to manufacture a finished product from separated for reuse materials and meets the requirements to qualify as a recycling center as set forth in section 17402.5(d) as determined by the enforcement agency, shall not be considered to be a conversion technology facility and shall not be subject to the requirements of Article 6.7. “Conversion Technology Operation” or “Facility” includes an operation or facility that uses a conversion technology to manufacture a finished product from separated for reuse materials but does not qualify as a recycling center.
- (e) “Conversion Technology Research Operation” means an operation that uses a conversion technology, is operated for the purpose of gathering research information on the technology, and that receives no more than 15 tons of organic material per day.
- (f) “Distillation” means a noncombustion thermal process used by a conversion technology facility to boil off constituents such as water and alcohol. For purposes of this Article, distillation does not include subsequent purification of products.
- (g) “Gasification” means a noncombustion thermal process used by a conversion technology facility to convert solid waste to a gas or fuel for purposes of generating electricity or producing chemicals or fuels, and that meets the definition of gasification in Public Resources Code section 40117.
- (h) “Hydrolysis” means a biological or chemical process used by a conversion technology facility in which acids and/or enzymes are used to convert cellulose and hemicellulose chains in solid waste into their component sugars.
- (i) “Large Volume Conversion Technology Facility” means a facility that receives 100 tons or more of solid waste per operating day for the purpose of placing directly into a conversion vessel for processing; or storing, handling or processing waste prior to the on-site transfer of the waste into a conversion technology vessel.
- (j) “Limited Volume Conversion Technology Operation” means an operation that receives less than 60 cubic yards, or 15 tons of solid waste per operating day (whichever is greater) for the purpose of placing directly into a conversion vessel for processing; or storing the waste prior to the on-site transfer of the waste into a conversion technology vessel and which does not conduct processing activities other than conversion technology, but may conduct limited salvaging activities and volume reduction by the operator.
- (k) “Medium Volume Conversion Technology Facility” means a facility that receives equal or greater than 60 cubic yards or 15 tons (whichever is greater) of solid waste per operating day but less than 100 tons of solid waste, for the purpose of placing directly into a conversion vessel for processing; or storing or handling the waste prior to the on-site transfer of the waste into a conversion technology vessel.

- (l) “Noncombustion Thermal Process” means the use of a thermal process, other than combustion, on organic materials to yield products, including, but not limited to, electricity, alternative fuels, chemicals, or other products that meet quality standards for use in the marketplace. “Noncombustion Thermal Process” includes, but is not limited to, distillation, gasification, and pyrolysis.
- (m) “Pyrolysis” means a noncombustion thermal process used by a conversion technology facility in which solid waste is degraded through the use of elevated temperatures in the absence of oxygen.

17XX3 Regulatory Tier Requirements for Conversion Technology Operations and Facilities

Sections 17XX3.1 through 17XX5 set forth the regulatory tier requirements [(Title 14, Division 7, Chapter 5.0, Article 3.0 (commencing with section 18100) or Title 27, Division 2, Subdivision 1, Chapter 4, Subchapter 3, Articles 2, 3 and 3.1 of the California Code of Regulations (commencing with section 21570)] that apply to specified conversion technology operations and facilities.

17XX3.1 Excluded Activities

- (a) The activities listed in this Section are not required to meet the requirements set forth within this Article.
- (1) Conversion technology activities conducted in a closed environment, such as a container or vessel with a total daily processing capacity of less than 15 cubic yards are excluded if the feedstock is stored on-site for less than 48 hours prior to placement into that closed environment.
- (2) The processing of petroleum by-products through conversion technology is an excluded activity.

17XX3.2 Permit Name

A full solid waste facility permit issued pursuant to this Article shall be entitled: “Conversion Technology Facility Permit.”

17XX3.3 Limited Volume Conversion Technology Operation

All limited volume conversion technology operations subject to this Article shall comply with the Enforcement Agency Notification requirements set forth in Title 14, Division 7, Chapter 5.0, Article 3.0 of the California Code of Regulations (commencing with section 18100). These operations shall be inspected by the EA as necessary to verify compliance with minimum standards. Inspections shall be conducted quarterly, unless the EA determines a lesser frequency is necessary, but in no case shall the frequency be less than annual. The operator shall specify the operation’s boundary area in the operating record.

17XX3.4 Medium Volume Conversion Technology Facility

All medium volume conversion technology facilities subject to this Article shall comply with the Registration requirements set forth in Title 14, Division 7, Chapter 5.0, Article 3.0 of the California Code of Regulations (commencing with section 18104). These facilities shall be inspected monthly by the EA in accordance with PRC section 43218.

17XX3.5 Large Volume Conversion Technology Facility

All large volume conversion technology facilities subject to this Article shall obtain a Full Solid Waste Facilities Permit, in accordance with the procedures set forth in Title 27, Division 2, Subdivision 1, Chapter 4, Subchapter 3, Articles 2, 3, and 3.1 of the California Code of Regulations (commencing with section 21570). The conversion technology facility report required by section 18XXX shall constitute the Report of Facility Information required by section 21570(f)(2) of Title 27. These facilities shall be inspected monthly by the EA in accordance with PRC section 43218.

17XX3.6 Facility Plan

Each operator of a Medium Volume Conversion Technology Facility, as defined in section 17XX2(k), shall file with the EA a "Facility Plan" or "Plan" (as specified in section 18221.5). In addition, a gasification facility shall describe how it will meet the requirements of PRC section 40117. The information contained in the plan shall be reviewed by the EA to determine whether it is complete and correct as defined in Title 14, Division 7, Chapter 5.0, Article 3.0, section 18101.

17XX3.7 Conversion Technology Facility Report

(a) Each operator of a Large Volume Conversion Technology facility, as defined in section 17XX2(i), shall file with the EA a "Transfer/Processing Report" or "Report" (as specified in section 18221.6), but shall label it a Conversion Technology Facility Report. In addition, a gasification facility shall describe how it will meet the requirements of PRC section 40117. Any operator of an existing facility who submits an application package to the EA, pursuant to Title 27, section 21570, which proposes to change the facility's operations, or to change the solid waste facility permit shall do one of the following:

- 1) Submit the updated information as an amendment to the existing RSI or in the form of the Transfer/Processing Report; or
- 2) Submit a complete Transfer/Processing Report as described in section 18221.6.

17XX4 Conversion Technology Research Operations

- (a) An operator conducting conversion technology research operations shall comply with the Enforcement Agency Notification requirements set forth in Title 14, Division 7, Chapter 5.0, Article 3.0 (commencing with Section 18100) of the California Code of Regulations, except as otherwise provided by this Chapter.
- (b) The EA may limit the amount of material received by a conversion technology research operation to an amount less than 15 tons per day if the EA determines that based on operation characteristics and material type received a lower amount is necessary to protect public health, safety, and the environment.
- (c) In addition to the Enforcement Agency Notification requirements set forth in Title 14, Division 7, Chapter 5.0, Article 3.0, Section 18103.1 (a)(3), the operator shall provide the EA with a description of the operation, including site boundary, research to be performed, research objectives, methodology/protocol to be employed, data to be gathered, analysis to be performed, how the requirements of this Article will be met, and the projected timeframe for completion of the research operation.
- (d) The Enforcement Agency Notification for a conversion technology research operation shall be reviewed after each two-year period of operation. Review criteria shall include the results and conclusions drawn from the research.
- (e) Conversion technology research operations shall be inspected by the EA as necessary to verify compliance with minimum standards, but in no case shall the frequency be less than annually.

17XX5 Applicability of State Minimum Standards

- (a) The minimum standards set forth in Articles 6.1, 6.2, and 6.3 of this Chapter (commencing with section 17406.1) shall also apply to all conversion technology operations and facilities.
- (b) Article 6.35 of this Chapter sets forth additional minimum standards that shall apply only to conversion technology facilities.
- (c) Approvals, determinations and other requirements that the EA is authorized to make in Articles 6.2, 6.3, and 6.35 shall be provided in writing by the EA to the operator. The operator shall place a copy of these approvals in addition to those records identified in sections 17414 and 17414.1 in the operating record.
- (d) Some of the standards contained in Articles 6.1, 6.2, 6.3, and 6.35 of this Chapter allow the EA to approve an alternative method of compliance with the standard. These provisions are not intended to allow the EA to change the particular standard, but are intended to allow the EA flexibility to approve, in advance, an alternative method of meeting the existing standard. For facilities that require a full solid waste facility permit, the EA may choose to include the approved method as a term and condition of the solid waste facility permit, rather than in the manner authorized by subdivision (c) of this section. If the method is included in the solid waste facility permit, a change to the method may require a revision to the solid waste facility permit in accordance with the procedures set

forth in Title 27, Division 2, Subdivision 1, Chapter 4, Subchapter 3, Articles 2, 3, and 3.1 (commencing with section 21570).

17XX7 Disposal Reporting System Requirements

Conversion technology facilities shall be subject to the disposal reporting requirements for stations as set forth in section 18800 et seq.